

# PRESENTATION OF AAQIUS

AAQIUS S.A. has been developing disruptive mobility technologies for over ten years now. The company's originality lies in its unfettered global outlook, driven by a blend of technological creativity and practical innovation. Its focus is on local development and on promoting even development across different regions, especially for those living in highly precarious conditions.

AAQIUS's core business is innovation engineering, in connection with finance and marketing. Its approach has proven very effective in developing intangible assets in the highly conservative transport industry. AAQIUS always starts by carrying out prospective studies to establish which technological angles to pursue. It regularly compares the results of its research programmes with changes in usage patterns, and also keeps abreast of new trends through its monitoring centres in Europe, China and North Africa.

Each project is developed by exploring new and forgotten areas, applying existing technologies to new applications, and drawing on the very best expertise worldwide. AAQIUS has state-of-the-art research laboratories. At every stage of a project, the focus is on value creation and performance.

# AAQIUS

Thus, AAQIUS scored a technological breakthrough with an innovative nitrogen oxide emissions control based on an on-board urea tank. Manufacturers were amazed by both the technology and the business model behind it. Today, the system features in more than 20 million vehicles across the world. However, the practical application of the system very quickly revealed its limitations, which led to the development of a new solution. Thus the first cartridge for storing gas in solid form came into being, which is today being developed under the name DeNox-One. A whole new depollution ecosystem has been created, involving new manufacturers and players.

In order to continue its offensive and to give these disruptive technologies every chance of success, the shareholders of AAQIUS have set up an investment fund, AALPS Capital, which supports manufacturers in the implementation of technologies. It is accelerating the transition to a zero-carbon future. According to Stéphane Aver, the CEO of AAQIUS, "Stor-H has the potential and the means to become the new energy standard for green mobility".



Under these circumstances, AAQIUS has acted very quickly to dispel all the misconceptions about hydrogen.

**- Is hydrogen dangerous?**

**No.** It is only dangerous when stored in high-pressure tanks, not in low-pressure cartridges like Stor-H.

**Does the use of hydrogen mean high infrastructure costs for fuelling stations?**

**No,** not if solid-state cartridges are used, which are available in stores and automatic vending machines everywhere, or can be delivered directly to your door.

**Is hydrogen produced only in large industrial structures, from fossil energy sources?**

**No.** Hydrogen can be produced locally from renewable energy sources. It is currently the best solution for storing clean electricity, particularly for clean transport.

**Is hydrogen an outdated technology?**

**No.** It was unable to develop because of poor decisions made in the past and because of inadequate R&D in fuel cells and, above all, in solid-state storage, which delayed its implementation.

# PRESS KIT

# AAQIUS

GET TO THE FUTURE \_\_\_\_\_ FIRST

## AAQIUS, AT THE HEART OF THE HYDROGEN REVOLUTION

For several years, researchers and marketers at AAQIUS — a company specialising in innovative depollution technologies — have been striving to find an effective response to pollution from cars and motorcycles.

They have finally opted for hydrogen. CEO Stéphane Aver and his staff are banking on this new fuel source:

“*Is that what we want for our country? To go from being dependent on fossil fuels to being dependent on batteries? That is where the danger really lies, especially for emerging countries. Hydrogen, an energy carrier for downstream applications in the renewable energy sector, unquestionably offers all countries an excellent CARBON-FREE means of attaining energy independence, because it is produced locally for the specific purposes of green mobility and energy-independent housing*”

AAQIUS believes that developing a hydrogen industry was a historical necessity: We must prepare for the end of oil and gas, address the cost of nuclear power and limit global warming to 2°C. Renewable energy is a necessity. However, all countries and regions must take into consideration the limitations of wind and solar energy. Where once we harvested energy from beneath the Earth's surface, now we are harnessing above-ground sources.

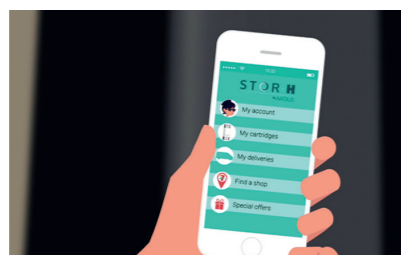


“*Our teams are constantly seeking out the blind spots in their pursuit of innovation. This means that they have to keep moving forward and questioning current practices. AAQIUS knows how to navigate the turbulence that is part of every transition process. And the energy transition must not be held back by conformism, laziness, or a lack of lucidity and therefore innovation.*”



# STOR-H, OR THE EMERGENCE OF THE HYDROGEN INDUSTRY

**STOR-H**  
by AAQIUS



^ An app designed to help users manage their Stor-H energy use, and to help professionals manage the Stor-H network

The technology has been certified by the French government as part of the "Hydrogen Territories" tender issued in 2016 by the Ministry of the Environment, Energy and Marine Affairs. Several cities and regions in France are backing the project. Well-known companies like Air Liquide and SNCF are involved in the project, along with manufacturers such as ECCITY and Cycleurope.

The connected hydrogen cartridge, Stor-H, is regarded as the missing link in electricity-powered mobility and the hydrogen industry. AAQIUS was convinced that a technological breakthrough was needed to provide clean, efficient and cost-effective transportation. The challenge was to develop an energy storage device that would be as easy to use as the battery for an electric lamp. Researchers at AAQIUS also fully resolved the safety issues surrounding storage systems.

Stor-H was introduced at the COP21 climate change conference in Paris in December 2016, and was tested on around one hundred scooters in the streets of Paris and in Asia. The technology has been thoroughly tried and tested, and is reliable and safe. For the wind, solar and biomass energy industries, it provides a key means of promoting ZERO-CARBON electricity through a new and universal solution. —

## STOR-H: A DOUBLE TECHNOLOGICAL REVOLUTION IN THE STORAGE AND USE OF HYDROGEN.

The first revolution lies in the pressure-free — and therefore completely safe — storage of inert hydrogen in a complex, multi-material and ultra-absorbent storage medium. Eight years of research in ten specialised laboratories across the world culminated in the creation of Stor-H, with a portfolio of more than 150 patents. The extraordinary expertise developed by AAQIUS has already been turned into a globally successful product called DENOX'ONE, which is designed to reduce nitrogen oxide (NOx) emissions from heat engines.

The second revolution lies beyond the realms of technology. The aim is to give the world a new energy standard that will enable future generations to keep transport emissions as close to zero as possible, with a caring business model that supports people seeking carbon-free mobility through a B2B2C app.

## STOR-H, A RESPONSE TO THE GROWING DEMAND FOR SUSTAINABLE MOBILITY

All large cities across the world are confronted with the issue of urban mobility. Besides the environmental issues highlighted at the COP22 conference, no government can ignore the harmful effects of urban pollution on public health.

It is all the more important because, while mobility is essential to find work and to access all kinds of services, it is also an unfulfilled social requirement. Development and the very concept of progress rely on the ability of people to move around, even in the age of the Internet and social media. However, the environment must be protected.

Stor-H was designed with this in mind, which was already a considerable novelty; but, above all, it was designed according to specific regional needs. In France, Morocco and China, the project was based on local needs and customs (Brittany, Normandy, Marrakech, Nanjing, etc.). Stor-H is not just a technological innovation, it is also a regional and social innovation. Stor-H, the connected hydrogen cartridge, is an amazing technological achievement enabling the creation, development and maintenance of a low-carbon ecosystem in urban areas and beyond. —

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Thanks to hydrogen and to AAQIUS's Stor-H technology, clean, efficient, shared and economical transportation solutions are now possible. Today, there is no other viable alternative to electric vehicles, which use highly polluting batteries based on rare, speculative materials with a short lifespan, requiring large, costly facilities that, in terms of land-use planning, are incompatible with modern lifestyles.

3 KEY REQUIREMENTS OF MODERN MOBILITY:

1. Electric motors based on the Stor-H standard make the zero carbon emissions target feasible and prevent noise pollution which, while it receives less media coverage, has a real impact on health and quality of life.

2. Sharing or controlled usage time: Individual, privately owned vehicles are no longer the solution. Early initiatives such as Velov/Velib in France and OFO in China have clearly demonstrated the societal and environmental advantages of sharing.

3. Infrastructure: The Stor-H project does not require the construction of specific, very costly fuelling stations. The cartridge is available from convenience stores, distributors and vending machines (of the kind that sell drinks and snacks). The Stor-H Inside vehicle does not require a charging station.